

WHAT IS CLAIMED IS:

1. A method for performing a fast acquisition of a Pseudo Noise (PN) sequence in a transmitter, comprising:

spreading and transmitting a state signal for a main shift register generator by an igniter sequence; and

spreading and transmitting a data signal by a main sequence generated by the main shift register generator.

2. The method of claim 1, further comprising:

receiving and despreading the state signal for the main shift register generator of the transmitter by the igniter sequence; and

receiving and despreading the data signal by the main sequence based on the state signal.

3. The method of claim 1, wherein the igniter sequence and the main sequence are transmitted simultaneously.

4. The method of claim 1, wherein the igniter sequence is generated using a plurality of shift register generators (SRGs), and wherein each of the plurality of a SRGs has a different structure than the structure of the other a SRGs.

5. A method for performing a fast acquisition of a Pseudo Noise (PN) sequence in a receiver, comprising:

receiving and despreadng a state signal for a main shift register generator

6. The method of claim 5, further comprising:

detecting the data signal by tracking the main sequence;

reconfirming a synchronization state obtained during the detecting step; and

continuing the detecting step in succession when an accurate acquisition is confirmed by observing detection characteristics for a prescribed period of time, retracting an acquisition complete message if it is determined that acquisition is not correct, and re-executing receiving and the spreading a state signal for the main shift register generator of the transmitter by the igniter sequence.

Rule 1.126 7. The method claimed in claim 1, wherein said the first igniter sequence has a period equal to a duration of a single bit of a data symbol.

8. The method claimed in claim 1, wherein receiving and synchronizing the first igniter sequence comprises:

acquiring the first igniter sequence transmitted from the transmitter; and

determining an acquisition completion of the first igniter sequence.